

ART. XI.—Notes and Descriptions of New Zealand Lepidoptera.

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CARADRINIDAE.

Agrotis spina Guen., *Noct.*, vol. 1, p. 269; Hamps., *Cat. Lep. Phal.*, vol. 4, p. 367.

This well-known Australian moth should be added to the list of New Zealand Lepidoptera. Dr. A. Jefferis Turner, of Brisbane, has kindly supplied me with examples, and these show that *spina* has been hitherto overlooked by New Zealand lepidopterists, having been treated as a form of *A. ypsilon*. The males of the Australian examples which I have are more ochreous than New Zealand specimens, but the females are of almost exactly the same tint. The chief difference between the species is to be found in the form of the subterminal line: in *ypsilon* this is strongly dentate, whilst in *spina* it is only slightly irregular. In *spina* also the orbicular and reniform are connected by a prominent blackish bar, this being absent in *ypsilon*. These distinctions, however, apply best to the males, the females of the species being very difficult to separate.

From Dr. Turner I learn that *Agrotis spina* is found throughout Australia, and is in some seasons extraordinarily abundant.

Aletia panda n. sp.

♂, 33 mm.; ♀, 36 mm. Head and palpi grey, in ♂ tinged with ochreous. *Antennae* in ♂ strongly *bipectinated*. Thorax grey, with dark bar on collar, crests absent. Abdomen greyish-ochreous. Legs greyish-ochreous, anterior tarsi blackish annulated with ochreous. Forewings, costa almost straight, apex rounded, termen oblique, evenly rounded; bluish-grey, tinged with ochreous, in ♀ mixed with blackish-fuscous; a black dot on costa at base, margined broadly with whitish; first line faintly indicated, irregularly dentate, fuscous, margined anteriorly with whitish; second line from $\frac{1}{2}$ costa to $\frac{3}{8}$ dorsum, deeply and widely indented on upper half, irregularly dentate on lower half, blackish; a thin dentate fuscous pre-subterminal line, curving beneath reniform and closely approaching second line, thence running parallel with it to dorsum, apex of teeth margined with white; subterminal line obscure, margined anteriorly, in ♂ narrowly, in ♀ broadly, with fuscous; a series of fuscous dots round termen; *orbicular* circular, pale, interruptedly margined with fuscous; *claviform* directly beneath *orbicular*, circular, half as large as, and similar in colouring to, *orbicular*; *reniform* pale, faintly fuscous-margined; cilia ochreous with basal and post-median fuscous lines. Hindwings in ♂ ochreous-fuscous, in ♀ fuscous: cilia ochreous, in ♀ with obscure fuscous line.

Very close to *A. cuneata* Philp. in appearance, but differing in the pectinated antennae and the pale-centred stigmata. In the structure of the antennae and palpi the new form comes nearer to *A. temenaula* Meyr. I have placed the species in *Aletia* owing to its obvious relationship to the *cuneata-temenaula* group, but the arrangement of species at present adopted for our New Zealand forms in this genus and *Leucania* seems to me to stand in need of revision.

A single pair is all the material at present available. The male was taken by Mr. G. V. Hudson on Mount Earnslaw in January, 1914, and the female was captured by myself at Routeburn in December, 1918. The types remain in the collections of their respective discoverers.

Melanchra inchoata n. sp.

♂ ♀. 33 mm. Head, palpi, and thorax greyish-ochreous sprinkled with fuscous. Thorax in both sexes with rather prominent anterior crest. Antennae in ♂ ciliated, ciliations $\frac{4}{5}$. Abdomen in both sexes with the first four or five segments prominently crested. Legs ochreous, tarsi annulated with fuscous. Forewings, costa almost straight, apex subacute, termen crenate, oblique below middle; *ochreous clouded with fuscous*, in ♀ darker; a small pale apical patch; a series of four or five paired fuscous dots on costa; all lines except subterminal very obscure; basal evenly curved, serrate, fuscous; first and second almost obsolete, apparently double, fuscous; a presubterminal thin serrate dark line faintly indicated; *subterminal conspicuous, unindented, equidistant with termen, white*; terminal crenations edged with black; stigmata unusually closely grouped; orbicular rounded, whitish, dark-centred; claviform small, dark fuscous; reniform dark fuscous, obscurely white-ringed: cilia ochreous, basally mixed with fuscous. Hindwings dark fuscous: cilia ochreous with dark-fuscous sub-basal line. Underwings ochreous thickly irrorated with fuscous, clear ochreous along costa and round termen of forewings; lunules and second lines of both wings fuscous.

Belongs to the *coeleno-levis* group, but is easily distinguished by the form of the subterminal line.

Stephen Island. Collected by Mr. H. Hamilton on the 9th September, 1916. I am indebted to Dr. J. A. Thomson, Director of the Dominion Museum, for the opportunity of describing this interesting species. Types, ♂ and ♀, in coll. Dominion Museum.

SPHINGIDAE.

Choerocampa celerio Linn.

In the *Transactions of the New Zealand Institute*, vol. 37, p. 369, Hudson records the first captures of this species in New Zealand, four examples having been taken in the summer of 1903-4. To this record I am able to add that of a specimen taken at Te Tua, near the southern coast of the South Island. The moth was taken by a resident of the district and forwarded to the Southland Museum, in the collection of which institution it remains. It is in fine condition, so fresh as to cast considerable doubt on the possibility of its having been wind-driven across a wide expanse of ocean.

PYRAUSTIDAE.

Scoparia pascoella n. sp.

♂ ♀. 15-18 mm. Head and palpi ferruginous-brown, palpi ochreous beneath. Antennal ciliations $\frac{1}{2}$. Thorax ferruginous-brown mixed with white. Abdomen fuscous-grey. Legs ochreous-grey mixed with fuscous, tarsi obscurely banded with fuscous. Forewings moderate, triangular, costa almost straight, apex round-pointed, termen hardly rounded, oblique; ferruginous-brown mingled with some fuscous and much suffused with white; first line hardly curved, unindented, white, broadly margined with ferruginous posteriorly; orbicular and claviform dot-like, blackish, partially obscured by ferruginous suffusion; reniform X-shaped, blackish, frequently obscure; *second line irregularly bent but not deeply indented, narrow, parallel to termen, white, narrowly margined with ferruginous anteriorly*; subterminal line obscure, interrupted at middle, widely remote from second line, white: cilia ochreous-grey. Hindwings grey-fuscous, paler anteriorly: cilia ochreous-grey with fuscous basal line.

Near *S. organaea* Meyr., but the forewings are much narrower at the base and the costa is straighter; the second line of the two forms is quite different both in colour and form. In some examples the white suffusion is very pronounced and the markings are more or less obsolete.

I took a good series on Tooth Peaks, Wakatipu, at an elevation of about 3,000 ft., in December. The species was abundant on the moist ground near a little stream. The specific name is intended as a tribute to the memory of the late Quartermaster Merlin Owen Pascoe, who fell at La Newaille, France, a few months before the conclusion of the war. Quartermaster Pascoe did a great deal of entomological work in the Wakatipu district, and was the first entomologist to collect on Tooth Peaks.

PYRALIDIDAE.

Endotricha pyrosalis Guen., *Lep.*, vol. 8, p. 219.

Among some moths sent to me several years ago by Mr. H. Hamilton was a single example of this species, labelled "Mt. Dennan (Tararua Mountains), February, 1911." I was not at the time able to identify the specimen, and as it was not in very good condition it was set aside in the hope of obtaining further material. Having now, through the kindness of Dr. Jefferis Turner, procured good examples of *pyrosalis* from Australia, I am able to make the above record. The species has a wing-expanse of about 20 mm. The forewings are rather bright yellow, densely sprinkled with pink, especially on the apical $\frac{2}{5}$. The hindwings are also bright yellow, and have the termen broadly margined with pink. The patagial tufts are much elongated, reaching more than half-way to the tornus of the hindwing.

I learn from Mr. H. Hamilton that this interesting capture could not have been made by him, as he did not visit Mount Dennan on the date recorded. He suggests that the moth was probably taken by his father, the late Augustus Hamilton.

PLUTELLIDAE.

Orthenches virgata n. sp.

♀. 10 mm. Head, palpi, and thorax ochreous. Antennae ochreous on basal fifth, annulated with white and black on remaining portion. Abdomen greyish-white. Legs, anterior pairs fuscous, tarsi obscurely annulated with ochreous, posterior pair ochreous-whitish. Forewings moderate, costa strongly arched, apex round-pointed, termen moderately oblique; bright ochreous with violet and purplish reflections; a brownish fascia from beneath costa near base to dorsum at $\frac{1}{4}$; a well-defined fascia from costa at $\frac{1}{4}$ to dorsum at $\frac{1}{2}$, slightly irregular, brownish mixed with black; a similar fascia from costa at $\frac{2}{5}$, strongly angled above middle towards termen, thence to dorsum at $\frac{2}{3}$, where it coalesces with inwardly-oblique fascia from costa at $\frac{3}{4}$, both these fasciae having black patches at middle; a white patch margining last fascia at middle; a few black scales on central portion of dorsum: cilia ochreous, becoming fuscous round apex. Hindwings and cilia shining white.

A well-marked species, having little affinity with any other member of the genus.

The type of this interesting species was taken at Auckland on the 2nd October, 1918, by Dr. A. Jefferis Turner, of Queensland, to whose generosity I am indebted for the specimen. Mr. Charles E. Clarke was fortunate enough to secure a second example at Waitati, Otago, in February, 1919, so that the species, though apparently rare, must be widely distributed.